



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,397	01/29/2001	Susumu Senshu	202442US6	6175

22850 7590 06/07/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
----------

KLIMACH, PAULA W

ART UNIT	PAPER NUMBER
----------	--------------

2135

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/770,397

**Applicant(s)**

SENSHU, SUSUMU

**Examiner**

Paula W. Klimach

**Art Unit**

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

This office action is in response to amendment filed on 09/22/2004. Original application contained Claims 1-24. Applicant added claim 25, and amended Claims 1, 6, 10, 15, 19, and 22. The amendment filed on 09/22/2004 have been entered and made of record. Therefore, presently pending claims are 1-25.

### ***Response to Arguments***

Applicant's arguments filed 09/22/2004 have been fully considered but they are not persuasive because of following reasons.

Applicant argued that the encrypting step requires that data identification information and data control information be encrypted by use of the write identification information. This is not found persuasive. The new grounds of rejection provide the reference Chou wherein the data identification information (in the form of a serial number) and the data control information (in the form of owner designation field) are encrypted.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., ...the disc ID and the write ID become unrelated to one another...encryption is performed by use of the recording medium identification information, which is particular to the recording medium...digital data identification information cannot be decrypted even though the reproduced data from the recording medium is copied, thus preventing copying of data) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations

Art Unit: 2135

from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant argued further that claim 1 requires generation of independent write identification information for each recording operation of the digital data. The disc key of Kato is the independent write identification information because it is unique to every disc hence the name disc key. Even if this was not identification information Chou discloses DK which is unique to the recording operation (column 3 lines 53-54). It was also used to encrypt the data identification information and the control information (column 5 lines 39-41).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al (6,301,663) in view of Chou (6,167,136).

*In reference to claims 1, 6, and 10*, Kato discloses a method and system for protecting against unauthorized copy of multimedia (abstract). The method comprises the steps of: generating independent write identification information for each recording of the digital data (column 6 lines 20-24). Kato further discloses encrypting data identification information of the digital data (column 6 lines 20-24). The Disc key performs the function of the write identification information because it identifies the disc and therefore the information on the disc.

Art Unit: 2135

The disc key is encrypted by the master key. Therefore the identification is encrypted. The method further comprises recording at least the encrypted data identification information and data control information, and the write identification information to the recording medium. The watermark is embedded on the audio data and the audio data is recorded on the media (column 9 lines 28-30 and Figs 4, 7, and 10). The watermark contains the master key (column 9 lines 44-47) and the copy control (data control) (column 6 line 66 to column 7 line 1 and column 9 lines 31-38). The encrypted disc key is also recorded on the disk (column 9 lines 59-62).

Although Kato discloses recording the copy control and the encryption of the disc key, therefore the potential to store and encrypt the copy control, Kato does not expressly disclose encrypting data control information by the use of the write identification information.

Chou discloses a system that has a serial number (data identification information) and an owner-designation field (control information) are encrypted (Fig. 7 in combination with column 5 lines 39-41).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the serial number and the owner-designation field as in Chou in the system of Kato. One of ordinary skill in the art would have been motivated to do this because encryption discourages fraud and increases the security of digital data.

*In reference to claims 2, 7, and 11*, wherein the digital data is encrypted by the data identification information, and the encrypted digital data is recorded to the recording medium along with the encrypted data identification information and data control information, and the write identification information (column 7 lines 34-36).

*In reference to claims 3, 8, and 12*, wherein the data control information includes copy control information for the digital data (column 6 line 66 to column 7 line 1).

*In reference to claims 4, 9, and 13*, wherein the encrypted data identification information and data control information, and the write identification information (column 10 lines 48-52) are encrypted by the use of recording medium identification information peculiar to the recording medium and recorded to the recording medium (column 6 lines 1-42).

*In reference to claims 5 and 14*, wherein a data processing unit for encrypting the data identification information and data control information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit (Fig. 1).

*In reference to claim 15, 19, and 22*, Kato discloses a method and system for protecting against unauthorized copy of multimedia (abstract) comprising the steps of: reproducing encrypted data identification information and write identification information, which are encrypted by the use of recording medium identification information from the recording medium (Fig. 2 part S13 in combination with column 5 lines 57-62); decrypting the encrypted data identification information and data by the use of the write identification information, and taking out the data identification information of the digital data and data control information (Fig. 2 part S13 and S16 in combination with column 7 line 66 to column 8 line 6).

Although Kato discloses recording the copy control and the encryption of the disc key, therefore the potential to store and encrypt the copy control, Kato does not expressly disclose encrypting data control information by the use of the write identification information.

Art Unit: 2135

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the copy control in the system of Kato. One of ordinary skill in the art would have been motivated to do this because encryption discourages fraud and increases the security of digital data.

*In reference to claims 16, 20 and 23*, wherein the digital data is encrypted by the data identification information and recorded to the recording medium, and the encrypted digital data is reproduced from the recording medium along with the encrypted data identification information and data control information, and the write identification information (column 7 lines 34-36).

*In reference to claims 17, 21, and 24*, wherein the encrypted data identification information and data control information, and the write identification information (column 10 lines 48-52) are encrypted by the use of the recording medium identification information peculiar to the recording medium (column 6 lines 1-42) and recorded to the recording medium, and the recording medium identification information is reproduced from the recording medium, and the data encrypted by the recording medium identification information are decrypted by the use of the recording medium identification information, and the encrypted data identification information and data control information, and the write identification information are taken out (Fig. 1).

*In reference to claim 18*, wherein a data processing unit for encrypting the data identification information and data control information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is

Art Unit: 2135

generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit (Fig. 1).

*In reference to claim 25*, wherein said generating step includes generating the write identification information with a random number generator (part 113 Fig. 10).

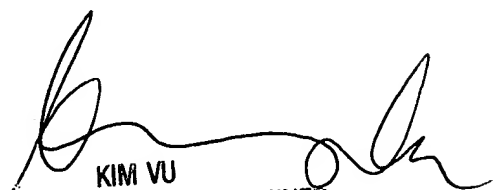
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854. The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK  
Wednesday, June 01, 2005

  
KIM VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100